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Page 1 of 13 Matter No.: 12875-003002 Applicant(s): Wei-Yu Lo, et al. PLACENTA DERIVED APOPTOTIC FACTOR CAG AGT 162 Ø \bowtie S \vdash AAA S K \bowtie CITA 999 99 207 153 Н 召 TG TG 130 Д \mathcal{O} \mathcal{O} S K E 召 S TAT IGI 198 144 \mathcal{O} \mathcal{O} GAT S 口 召 33 189 81. ≥ \mathcal{O} S H H \vdash 180 召 ⋈ AAG CAG 闰 ×

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FIG

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| 270 CTG | ļ | 324 ATT | H | 378 GGT | l O | 432 TCT | ഗ |
|------------|-----------------------|------------|----------------|--------------------------|-----------------------|------------|-----|
| CAA | | AAA | X | ACA | ! ! [' | TCT | Ŋ |
| GAA | 田田 | CAG | l Ø | AGC | i N | CAG | Q |
| 261 TTG | Ţ | 4 | [| 369 | ָ ט | 423 CAT | H |
| ICI | w | | 서 | GAT | | ATT | Н |
| AAT | 2 | AGG | K | S | Ц | TILL | Щ |
| 252 CAA | | 306 ATT | Н | 360 ATC | H | 414 CCT | Д |
| CAA | 0 | ACT | [- | 99 | · | | 니 |
| ACA | ! ! [| S : | Д | TIT | ſτι | GAT | Ω |
| 243 GCA | | 297 ACA | H | 351 AAT | Z | 405 CAA | Ø |
| GIG | | ATG | Ħ | TIG | 口 | ACA | H |
| | | GAC | Д | CC | Д | GCT | A |
| , GGG | | 288 AAG | X | 3 342 3 AAG AGA GAA C | 闰 | 396 GCA | Ą |
| AAT | Z | _ | ഥ | AGA | 瓦 | TTA | H |
| 999 | Ŋ | | \succ | AAG | X | AGA | K |
| 225 GGA | | 279 GAC | Д | 333 AAG | X | 387 AGT | W |
| GAA | 臼 | | Д | AIT | Н | TCT | Ŋ |
| ATC | Н | GAA | [1] | GIT | > | TIC | ĮΤι |

Matter No.: 12875-003002

Applicant(s): Wei-Yu Lo, et al. PLACENTA DERIVED APOPTOTIC FACTOR

FIG. 1B

| PLACENTA | DERIVED APOPTOTIC FACTOR |
|----------|--------------------------|

| 486 | GAA | 山田 | 540 TGT | U | 594 ATT | Н | 648 AAG | |
|-----|------------|----------|---------------------------|------------------|------------------------|---------|---------------------|-------|
| | GAA | 日 | GTA | > | TAC | Y | GGA ! | 0 |
| | GAA | <u>ы</u> | AAT | Ż | 33 | Ъ | TAC | |
| 477 | 1333 | <u> </u> | 531 ACC | Ţ | 585 ACT | Ľ | 639 AGT | 3 |
| • | GCA | A A | AGG | & | TCC | S | JOC | M |
| | AAT | l Z | | S | ACC | ₽ | 630 GGT. CAG | |
| 468 | ACC | [- | 522 AGA | <u> </u> | 576 CCT | щ | 630 GGT | 5 |
| | AAT | Z | CTG | 긔 | ACT | Ę | CTG | ū |
| | GAA | ш | GIŢ | \triangleright | 8 | പ | AGT | ഗ |
| 459 | CAG | | 513 GAA | 印 | 567 CAT | 田 | 621 GTG | > |
| | TGG | 3 | GAA | 山 | CAT | H | AGA | 柘 |
| | ACC. | <u> </u> | SCA. | Æ | THE | [Li | GAG | 田 |
| 450 | GAT | | 504 CAA | α | 558 CTG | 고 | 612 ATA | Н |
| | ITA | 1 | 133 | M | CIC | L | AAG | × |
| | GAC | 0 | 200 | A | | S | GTA | > |
| 441 | GGT | 0 | 495 GCA | A | 549 TGC | U | 603 TCA | S |
| | TTA | 1 | GAT | D A A | 549 TTA CTC TGC TCT | L | CAA | Q S V |
| | GAA | E L G D | 495 GAA GAT GCA GCC TI | 山口 | TTA | L | AAC CAA TCA GTA A | z |
| | | | | | | | - | · |

FIG. 1C

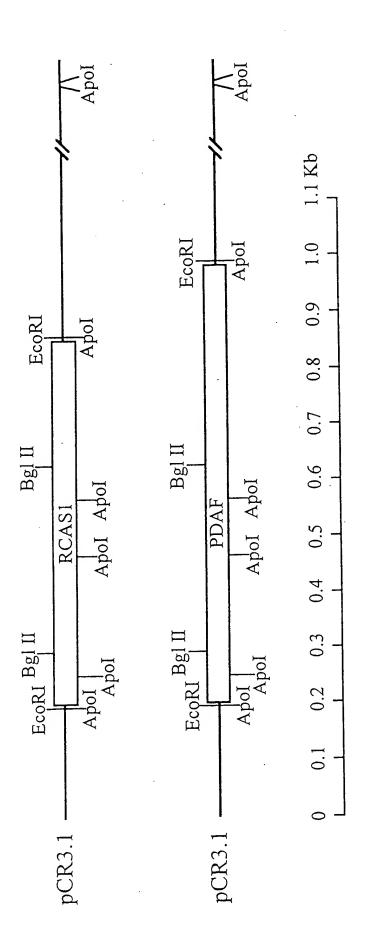
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| 702 Caa | 756 AAA | 4 |
|---------------------|---------------------------------|---------------------------------------|
| 1 | | Z . |
| GAA CAA E O | CAA AAC | |
| 693 GCC A | 747 GAA (| |
| GCA A | AAG | 4 |
| AGA | AAG | |
| 684 AAG | 738 ATG | |
| GAA | CITA | |
| AGA | S 2 | |
| 675 GAC | 729 CAA 0 | DIM |
| GCA A | A G | - m |
| CTPA L | GA. | TAA |
| 666 AAA | 720 AAG (| 774 TCA |
| CAG 1 | GAA E | CIT |
| CAG O | ATG M | AAA K |
| GAA | 711 AAG AAA AT K K K M | 765 GTG |
| 657 AGT AAG GAA CAG | AGG AAG AAA ATG R K K M | 765 ATT GGT GTG AAA I G V K |
| AGT S | AGG | AIT |
| | | |

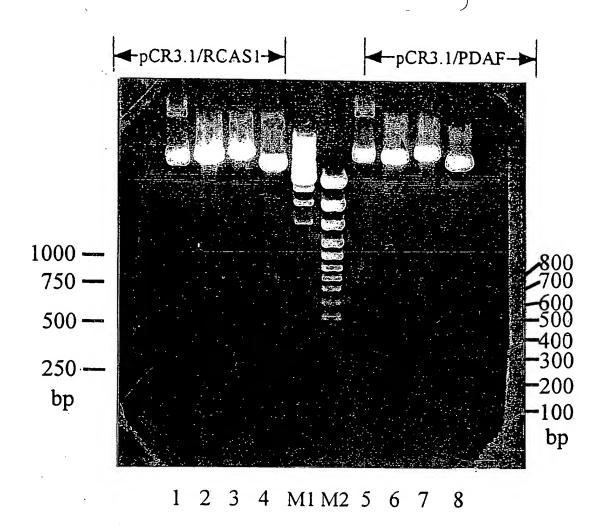
Box region: a novel peptide consists of 45 amino acids in the PDAF protein Shadow region: ATP-GTP binding site motif

Underline region: TM - transmembrane domain

DIM - coiled coil structure and dimeric domain



PLACENTÁ DERIVED APOPTOTIC FACTOR



lanel & 5: uncut

lane2 & 6: EcoRI cut

lane3 & 7: Bgl II cut

lane4 & 8: Apo I cut

M1:GeneRulerTM 1Kb DNA Ladder

M2:GeneRulerTM 100bp DNA Ladder Plus

FIG. 2B

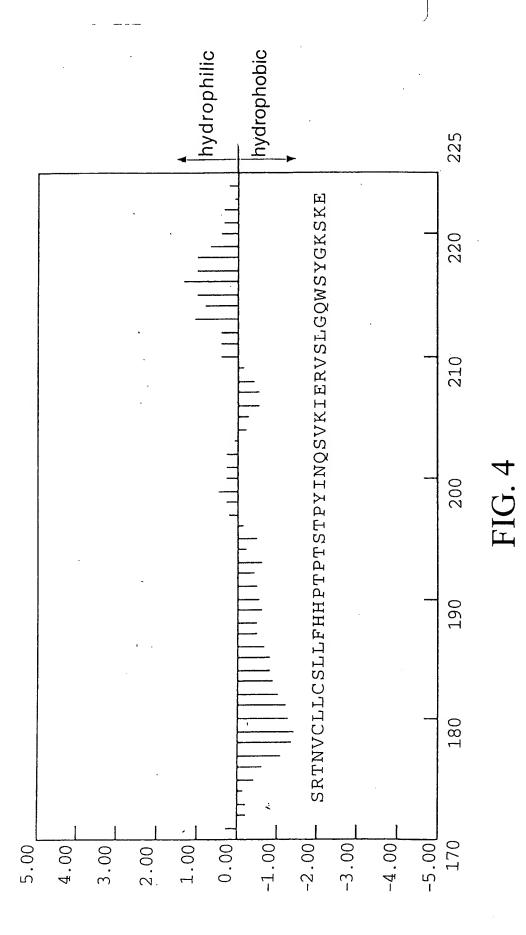
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185

++ S+ I+R+ 田古

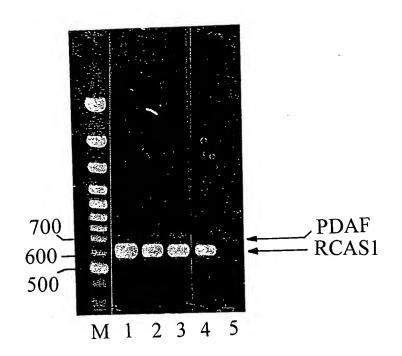
Positives = 17/29

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M: 100 bp DNA marker

lane1: MCF7

lane2: HT29

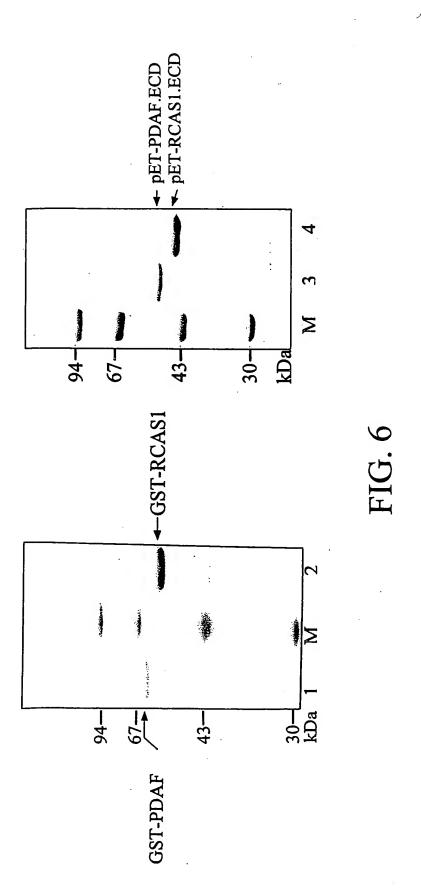
lane3: RD

lane4: A375

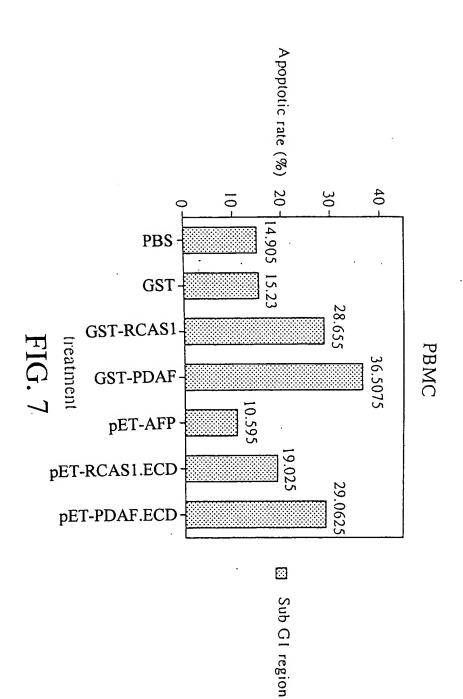
lane5: placenta

FIG. 5

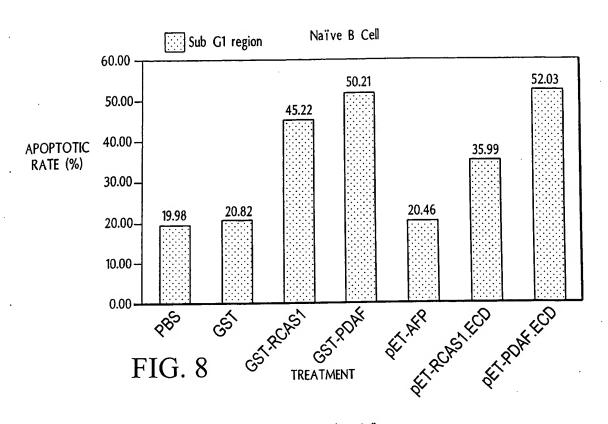
Matter No.: 12875-003002 Applicant(s): Wei-Yu Lo, et al. PLACENTA DERIVED APOPTOTIC FACTOR

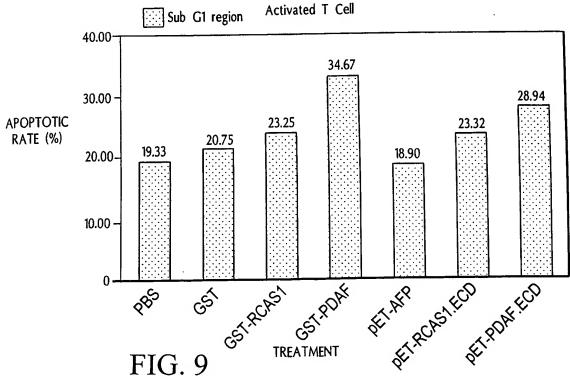


PLACENTA DERIVED APOPTOTIC FACTOR

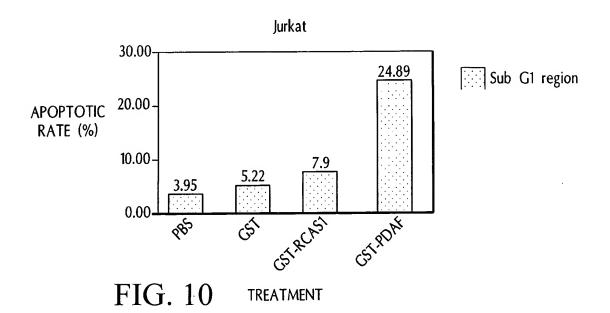


PLACENTA DERIVED APOPTOTIC FACTOR





PLACENTA DERIVED APOPTOTIC FACTOR



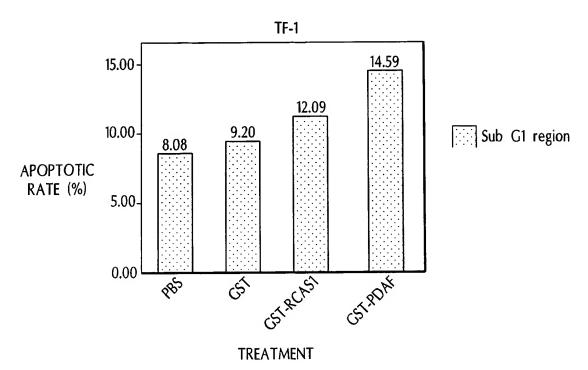


FIG. 11